

Docket No.: UC 0406 USCIP
 Application No.: 10/774,285
 Office Action Dated: May 15, 2006

PATENT

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

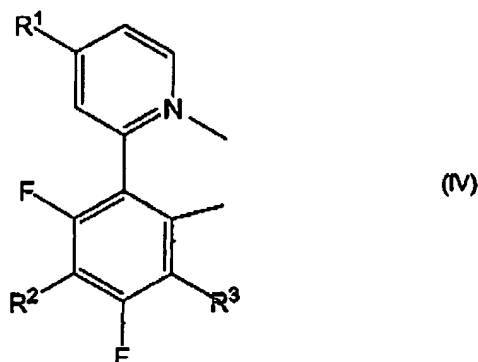
1. (Currently Amended) An active layer comprising at least one compound having a formula selected from Formula I, Formula II, and Formula III:



where:

in Formulae I, II, and III:

L¹ has Formula IV:



wherein:

R¹ = H, R⁴, OR⁴, N(R⁴)₂

R² = H, C_nF_{2n+1}, C_nF_{2n+1}SO₂, COOR⁴, CN

R³ = H, C_nF_{2n+1}, C_nF_{2n+1}SO₂, COOR⁴, CN,

R⁴ is the same or different at each occurrence and is H, alkyl, aryl, or adjacent R⁴ groups can join together to form a 5- or 6-membered ring, and

n is an integer from 1 through 20;

in Formula II:

L² is a ~~monoanionic bidentate ligand~~ phosphino alkoxide;

in Formula III:

L³ is a monoanionic monodentate ligand; and

L⁴ is a nonionic monodentate ligand.

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2. (Currently Amended) The active layer of Claim 1, wherein $R^{12}R^2$ and $R^{13}R^3$ are independently selected from H, CF_3 , C_2F_5 , $n-C_3F_7$, $i-C_3F_7$, C_4F_9 , CF_3SO_2 , $COOR^{14}$ COOR⁴ and CN.

3. (Canceled)

4. (Currently Amended) The active layer of Claim 1, wherein the compound has Formula # III and L^3 is a hydride.

5. (Currently Amended) The active layer of Claim 1, wherein L^1 is selected from ligand 1-a through 1-y as shown in Table 5:

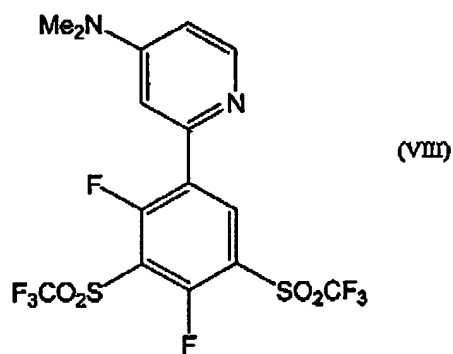
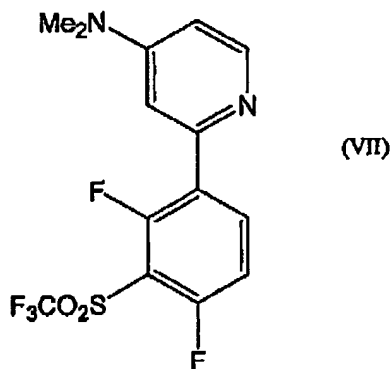
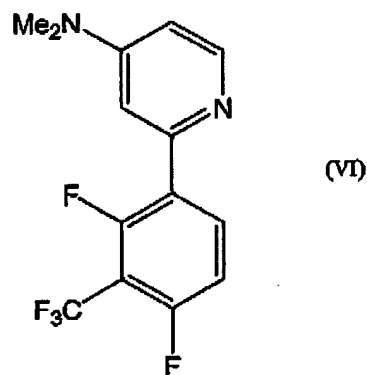
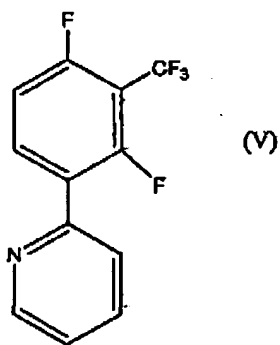
<u>Ligand</u>	<u>R¹</u>	<u>R²</u>	<u>R³</u>
<u>1-a</u>	H	H	H
<u>1-b</u>	H	<u>CF₃</u>	H
<u>1-c</u>	H	<u>COOMe</u>	H
<u>1-d</u>	H	<u>CN</u>	H
<u>1-e</u>	<u>CH₃</u>	H	H
<u>1-f</u>	<u>CH₃</u>	<u>CF₃</u>	H
<u>1-g</u>	<u>CH₃</u>	<u>COOMe</u>	H
<u>1-h</u>	<u>CH₃</u>	<u>CN</u>	H
<u>1-i</u>	<u>CH₃</u>	H	H
<u>1-j</u>	<u>t-butyl</u>	H	H
<u>1-k</u>	<u>OMe</u>	<u>CF₃</u>	H
<u>1-l</u>	<u>OMe</u>	<u>COOMe</u>	H
<u>1-m</u>	<u>OMe</u>	<u>CN</u>	H
<u>1-n</u>	<u>OMe</u>	<u>CF₃</u>	<u>CF₃</u>
<u>1-o</u>	<u>NMe₂</u>	H	H
<u>1-p</u>	<u>NMe₂</u>	<u>CF₃</u>	H
<u>1-q</u>	<u>NMe₂</u>	<u>COOMe</u>	H
<u>1-r</u>	<u>NMe₂</u>	<u>CN</u>	H
<u>1-s</u>	<u>NMe₂</u>	<u>CF₃SO₂</u>	H
<u>1-t</u>	<u>NMe₂</u>	<u>C₂F₅</u>	H

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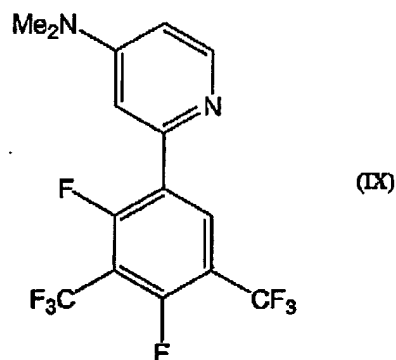
Ligand	R ¹	R ²	R ³
1-u	NMe ₂	CF(CF ₃) ₂	H
1-v	NMe ₂	H	H
1-w	NPh ₂	CF ₃	H
1-x	NPh ₂	COOMe	H
1-y	NPh ₂	CN	H

6. (Currently Amended) The active layer of Claim 1, wherein L¹ is selected from Formula V, Formula VI, Formula VII, Formula VIII, and Formula IX:



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7. (Original) An organic electronic device comprising at least one active layer of Claim 1.

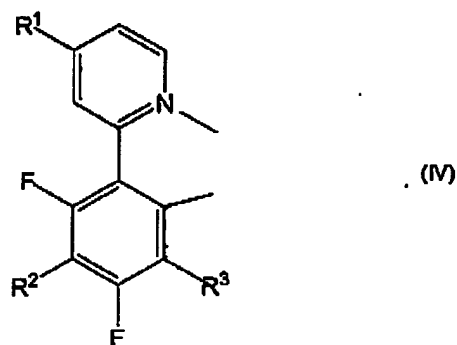
8. (Currently Amended) A compound having a formula selected from Formula I, Formula II, and Formula III:



where:

in Formulae I, II, and III:

L¹ has Formula IV:



wherein:

$R^1 = H, R^4, OR^4, N(R^4)_2$

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$R^2 = \text{H}, \text{C}_n\text{F}_{2n+1}, \text{C}_n\text{F}_{2n+1}\text{SO}_2, \text{COOR}^4, \text{CN}$

$R^3 = \text{H}, \text{C}_n\text{F}_{2n+1}, \text{C}_n\text{F}_{2n+1}\text{SO}_2, \text{COOR}^4, \text{CN},$

R^4 is the same or different at each occurrence and is H, alkyl, aryl, or adjacent R^4 groups can join together to form a 5- or 6-membered ring, and

n is an integer from 1 through 20;

in Formula II:

L^2 is a ~~monoanionic bidentate ligand~~ phosphino alkoxide;

in Formula III:

L^3 is a monoanionic monodentate ligand; and

L^4 is a nonionic monodentate ligand.

9. (Currently Amended) The compound of Claim 8, wherein L^1 is selected from ligands 1-a through 1-y, ~~as shown in Table 1:~~

<u>Ligand</u>	<u>R¹</u>	<u>R²</u>	<u>R³</u>
<u>1-a</u>	<u>H</u>	<u>H</u>	<u>H</u>
<u>1-b</u>	<u>H</u>	<u>CF₃</u>	<u>H</u>
<u>1-c</u>	<u>H</u>	<u>COOMe</u>	<u>H</u>
<u>1-d</u>	<u>H</u>	<u>CN</u>	<u>H</u>
<u>1-e</u>	<u>CH₃</u>	<u>H</u>	<u>H</u>
<u>1-f</u>	<u>CH₃</u>	<u>CF₃</u>	<u>H</u>
<u>1-g</u>	<u>CH₃</u>	<u>COOMe</u>	<u>H</u>
<u>1-h</u>	<u>CH₃</u>	<u>CN</u>	<u>H</u>
<u>1-i</u>	<u>CH₃</u>	<u>H</u>	<u>H</u>
<u>1-j</u>	<u>t-butyl</u>	<u>H</u>	<u>H</u>
<u>1-k</u>	<u>OMe</u>	<u>CF₃</u>	<u>H</u>
<u>1-l</u>	<u>OMe</u>	<u>COOMe</u>	<u>H</u>
<u>1-m</u>	<u>OMe</u>	<u>CN</u>	<u>H</u>
<u>1-n</u>	<u>OMe</u>	<u>CF₃</u>	<u>CF₃</u>
<u>1-o</u>	<u>NMe₂</u>	<u>H</u>	<u>H</u>
<u>1-p</u>	<u>NMe₂</u>	<u>CF₃</u>	<u>H</u>
<u>1-q</u>	<u>NMe₂</u>	<u>COOMe</u>	<u>H</u>
<u>1-r</u>	<u>NMe₂</u>	<u>CN</u>	<u>H</u>
<u>1-s</u>	<u>NMe₂</u>	<u>CF₃SO₂</u>	<u>H</u>

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Ligand	R ¹	R ²	R ³
<u>1-t</u>	<u>NMe₂</u>	<u>C₂F₅</u>	H
<u>1-u</u>	<u>NMe₂</u>	<u>CF(CF₃)₂</u>	<u>H</u>
<u>1-v</u>	<u>NMe₂</u>	<u>H</u>	<u>H</u>
<u>1-w</u>	<u>NPh₂</u>	<u>CF₃</u>	H
<u>1-x</u>	<u>NPh₂</u>	<u>COOMe</u>	<u>H</u>
<u>1-y</u>	<u>NPh₂</u>	<u>CN</u>	H

10. (Currently Amended) A compound of Claim 8, wherein R² and R³ are independently selected from H, CF₃, ~~C₂F₅~~, C₂F₅, ~~n-C₃F₇~~, n-C₃F₇, ~~i-C₃F₇~~, i-C₃F₇, ~~C₄F₉~~, C₄F₉, CF₃SO₂, ~~COOR⁴~~, COOR⁴ and CN.

11. (Canceled)

12. (Original) A compound of Claim 8, wherein the compound has Formula III and L³ is a hydride.

13. (Canceled)

14. (Original) An organic electronic device comprising a layer that comprises the compound of Claim 8.

15. (Original) An organic electronic device comprising a layer that comprises the compound of Claim 9.

16. (Original) An organic electronic device comprising a layer that comprises the compound of Claim 10.

17. (Canceled)

18. (Original) An organic electronic device comprising a layer that comprises the compound of Claim 12.

19. (Canceled)

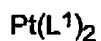
20. (Original) An active layer of claim 1 further comprising a diluent.

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21. (Original) An active layer of claim 20 wherein the diluent further comprises a material selected from a polymer, a small molecule, and a mixture thereof.

22. (New) An active layer comprising at least one compound having Formula I



(I)

wherein L^1 is selected from Formula VII and Formula VIII:

